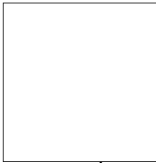


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CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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COUNTRY	USSR (Moscow Oblast)	REPORT		50X1
SUBJECT	1. Area Layout at NII-160, Fryazino 2. Klystron Production at NII-160	DATE DISTR.	11 March 1954	
		NO. OF PAGES	11	50X1-HUM
DATE OF INFO.				
PLACE ACQUIRED				

THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.
THE APPRAISAL OF CONTENT IS TENTATIVE.
(FOR KEY SEE REVERSE)

		50X1-HUM
	<u>Comments:</u>	

- 1. On Page 3, KAVALYENKO is probably KOVALENKO, MISHKIN is probably MYSHKIN, FISCHBEEN is FISHBAYN, and SUSMANOVSKIY is ZUSMANOVSKIY.
- 2. On Page 4, Shchelkhovo is properly Shchelkovo, Bolschovo is Bolshevo, Ivanteyevka is Ivanteyevka, and Yaroslavskiy is Yaroslavskaya.



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STATE	☒	ARMY	☒	NAVY	☒	AIR	☒	FBI	☒	AEC						
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(Note: Washington Distribution Indicated By "X"; Field Distribution By "#")

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SECURITY INFORMATION

REPORT [REDACTED]

50X1-HUM

COUNTRY : USSR

DATE DISTR. 17 FEB 54

NO. OF PAGES 10

SUBJECT : 1. Area Layout at Institute 160, Fryazino
2. Klystron Production at Institute 160, Fryazino

NO. OF ENCLS.
(LISTED BELOW)SUPPLEMENT TO 50X1-HUM
REPORT NO.

THIS IS UNEVALUATED INFORMATION

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1. [REDACTED] an organizational chart and area layout of Institute 160 at Fryazino [see pages 344 and 57].

2. [REDACTED] built the following klystrons at Fryazino:

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- a. A 3 cm. model which was copied directly from the American 3 cm. klystron.
- b. A 10 cm. 6 watt klystron of our own design.
- c. A 6 cm. 3 watt klystron.
- d. A 2 cm., 2 to 3 watt klystron both of which were designed at Fryazino.
- e. Some work on a new klystron to be built into a wave guide was also conducted.
- f. [REDACTED] developed a 3 cm. (American type) klystron with a diaphragm type of wobbler. This diaphragm was capable of being wobbled from 1000 to 1500 times per minute. The Soviets wanted to get the rate up to 3000 per minute with a movement of from 0.14 mm. to 0.2 mm. This was expected to change the wave length from 3.1 to 3.2 mm. This higher rate had not been achieved [REDACTED] sketches of this model [see pages 6 to 10]. It is the most recent model of the six.

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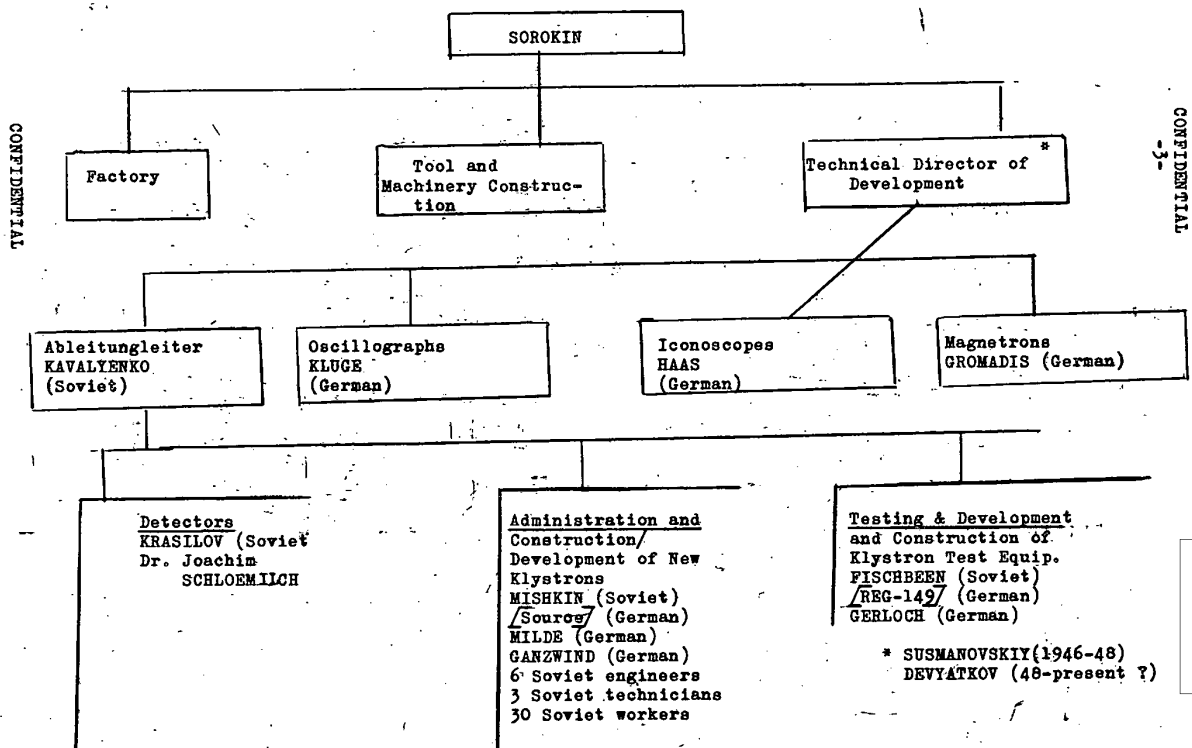
[redacted] Comments: The klystron sketched on page 6 shows excellent detail in the machine work portion of the sketch. It is interesting to note that the cathode construction pictured is according to the Heil design which is considered quite up to date. It will be noted [redacted] not shown the electrical connections and necessary insulation for the electrical parts of the klystron.

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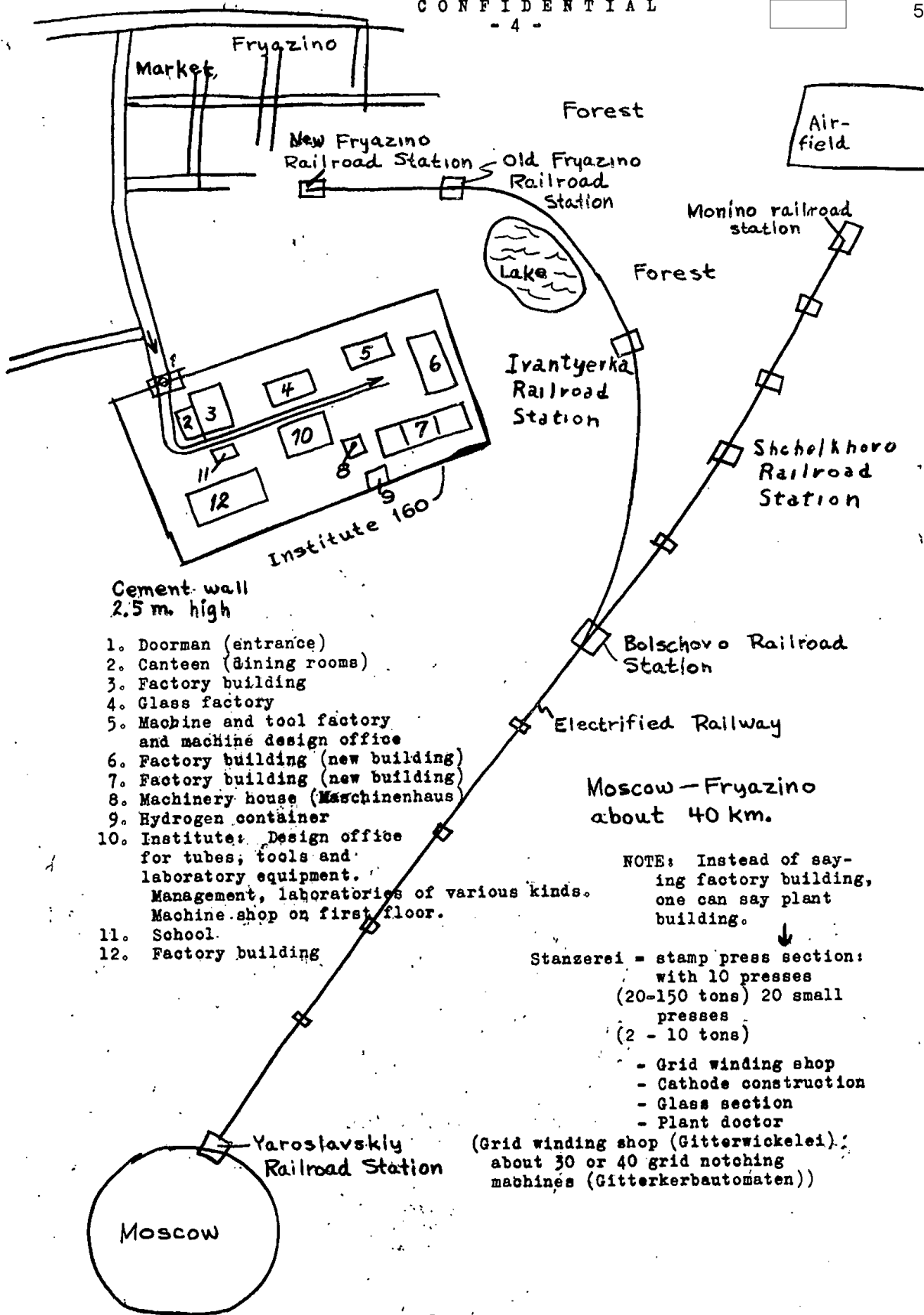
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INSTITUTE 160, PRYAZINO, USSR



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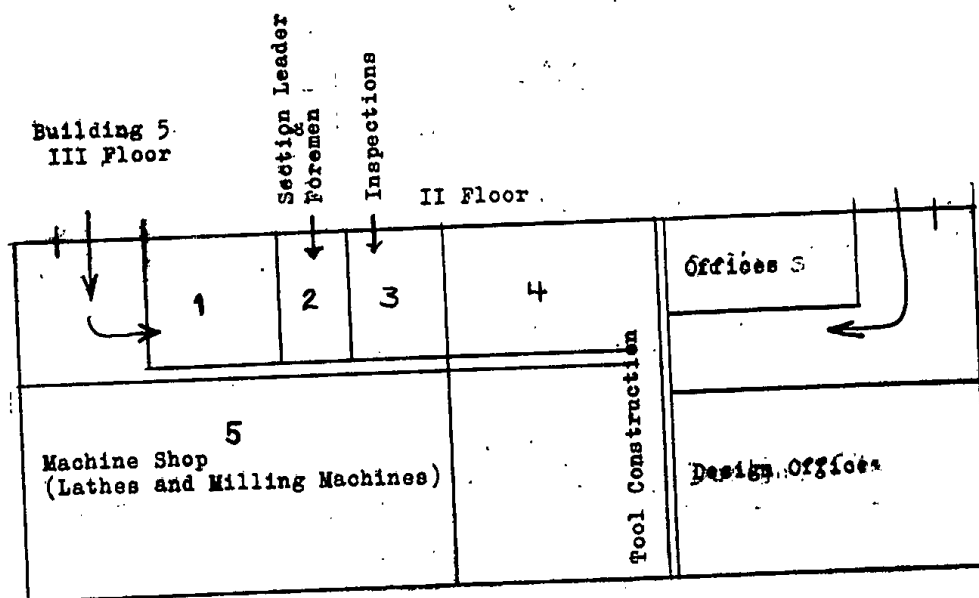
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1. 5 Cincinnati Circular Grinders
2 Surface Grinding Machines

2. Foremen Section

3. Inspections

4. Tool Construction

5. Machine Shop (Lathe Shop, Planing Shop, Steel Storage about 50 lathes, 10 milling machines, 5 planing machines, 2 Thiel press planers (Stempelhobler)).

2nd Floor: Machine Construction, Welding Shop, etc. 2 Drilling jigs (Swiss, Lindner).

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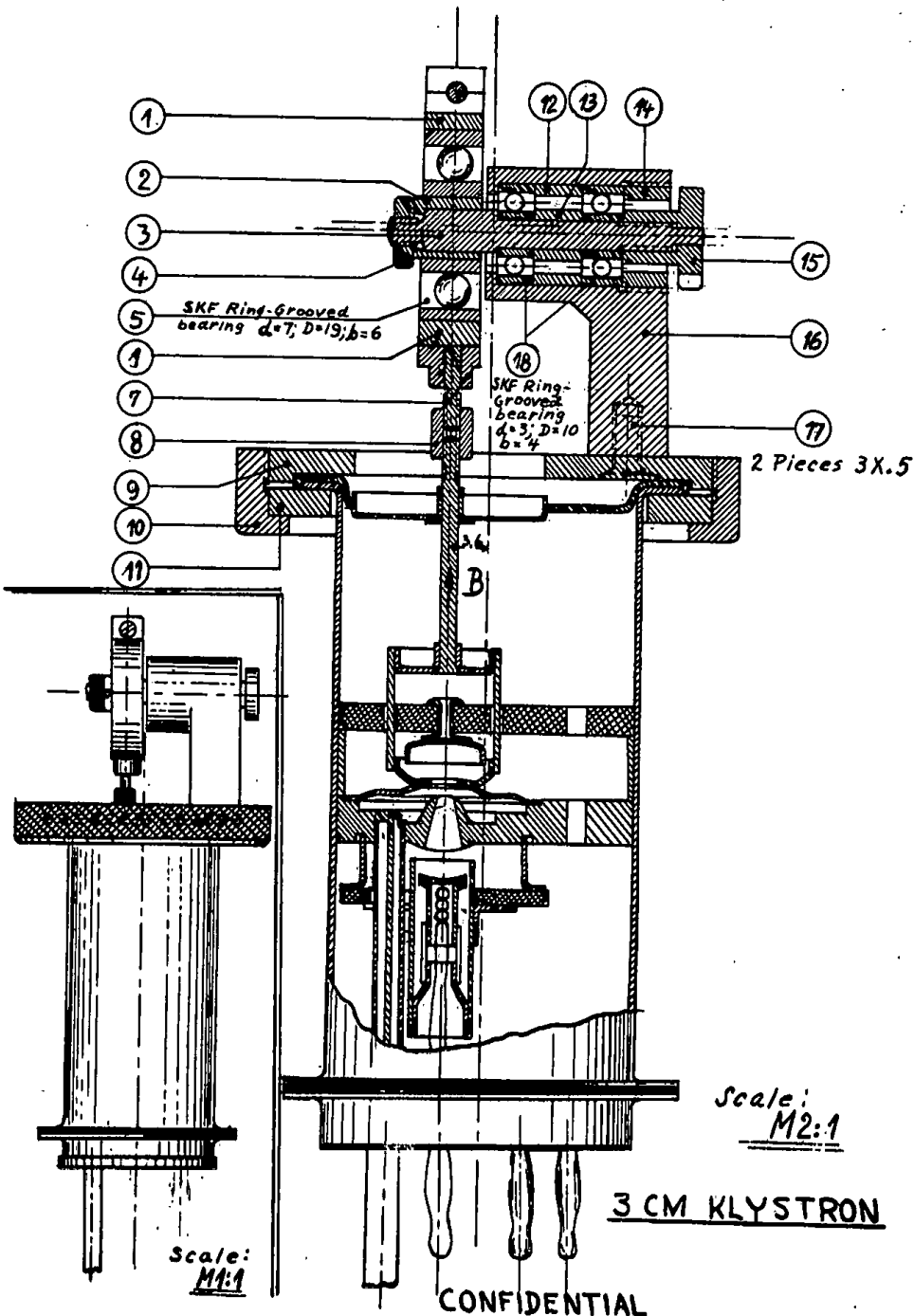
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Page 6

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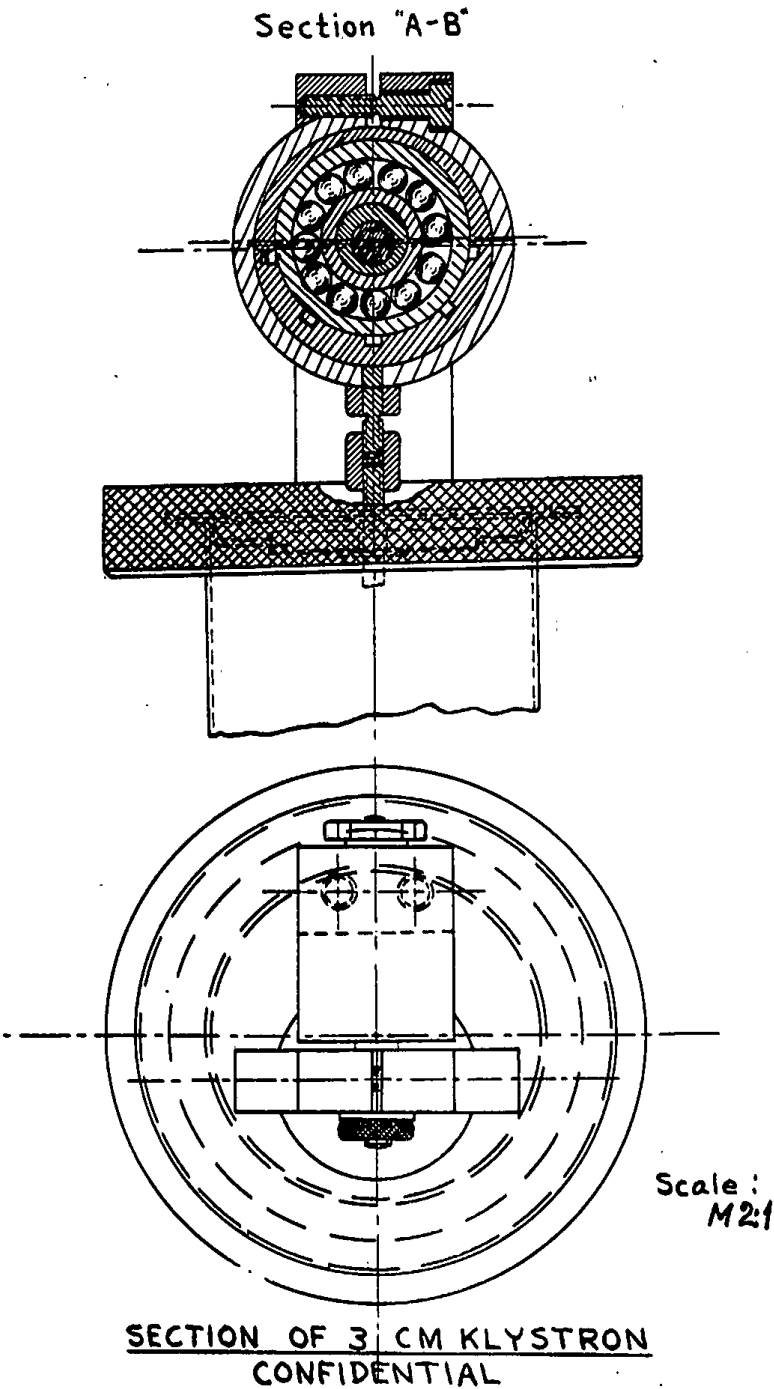
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Page 7

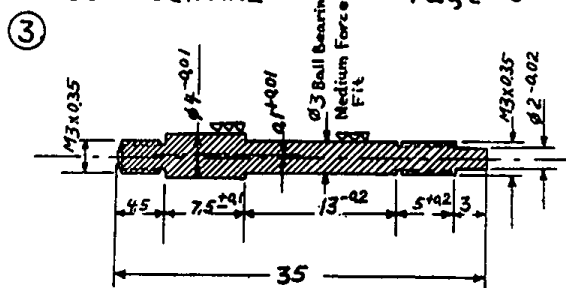


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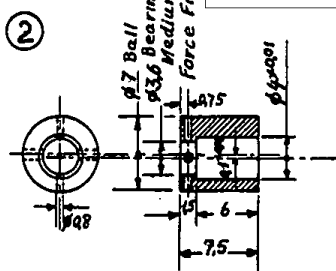


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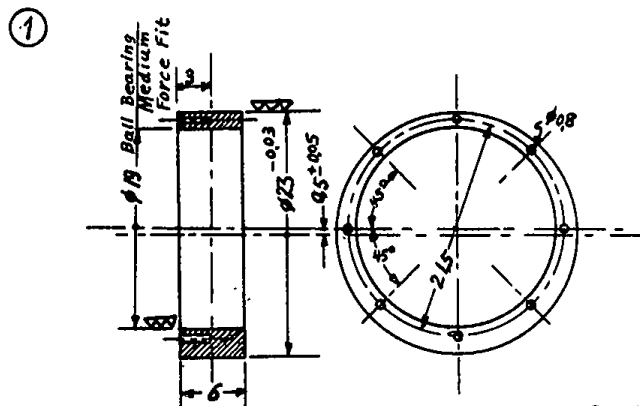
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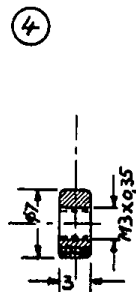
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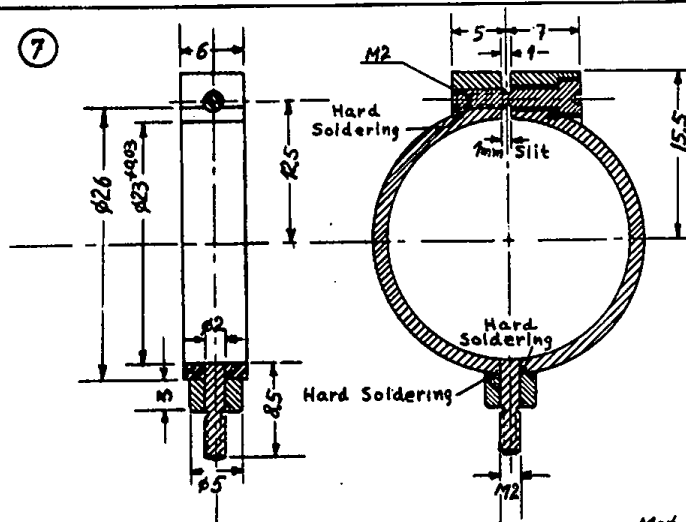
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Mat. 5434.11 Scale: M2:1



Mat. St 38.13 Scale:
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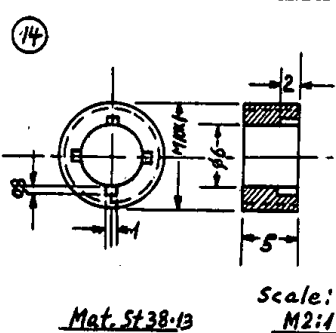
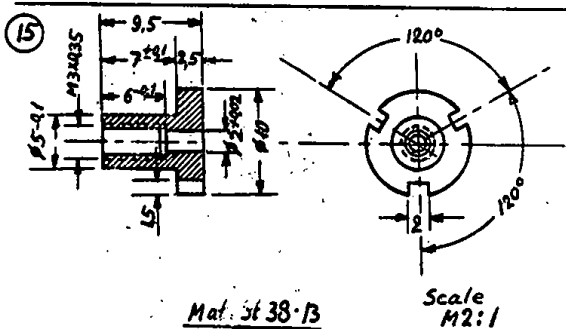
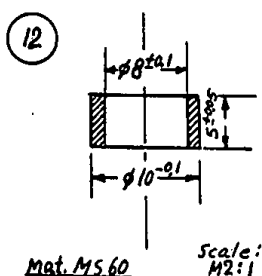
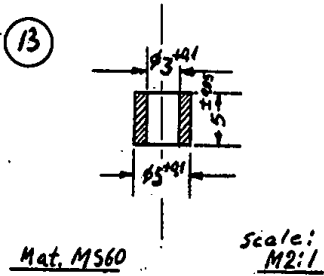
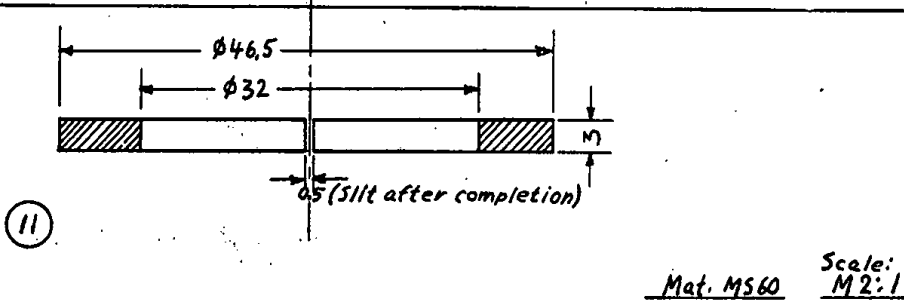
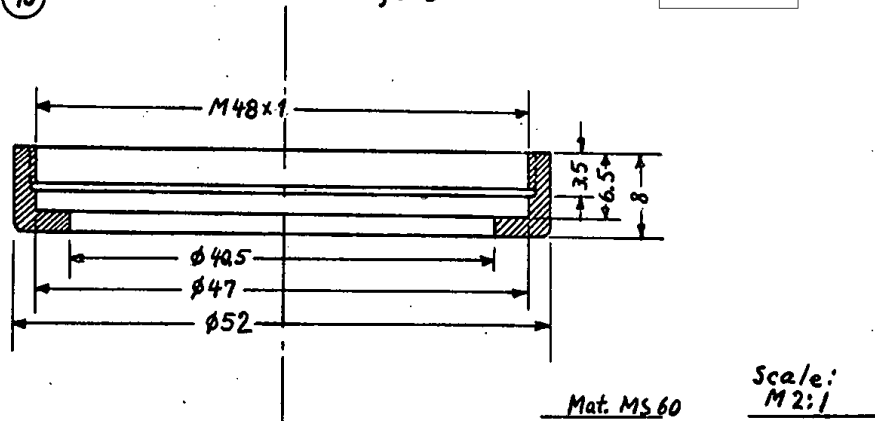


Mat. St 34.11 scale: M2:1

SECTIONS OF 3 CM KLYSTRON
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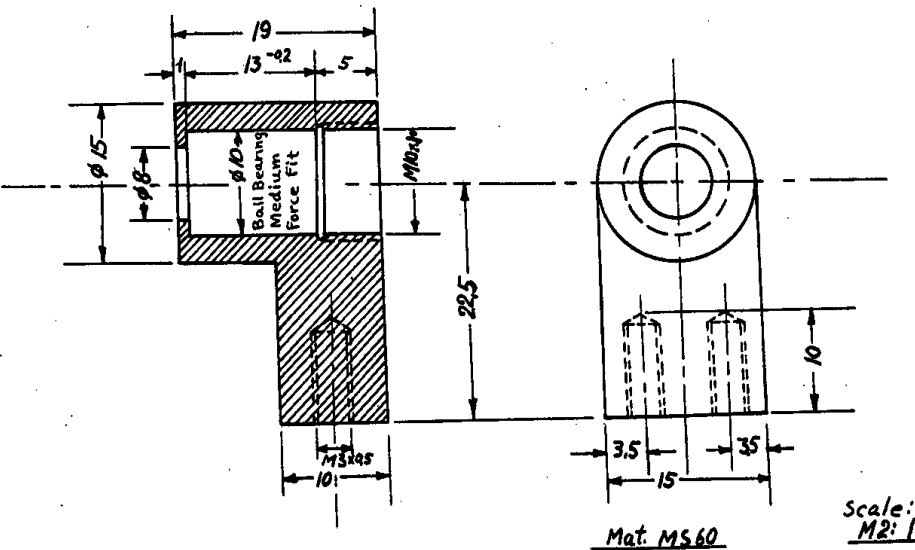
SECTIONS OF 3 CM KLYSTRON
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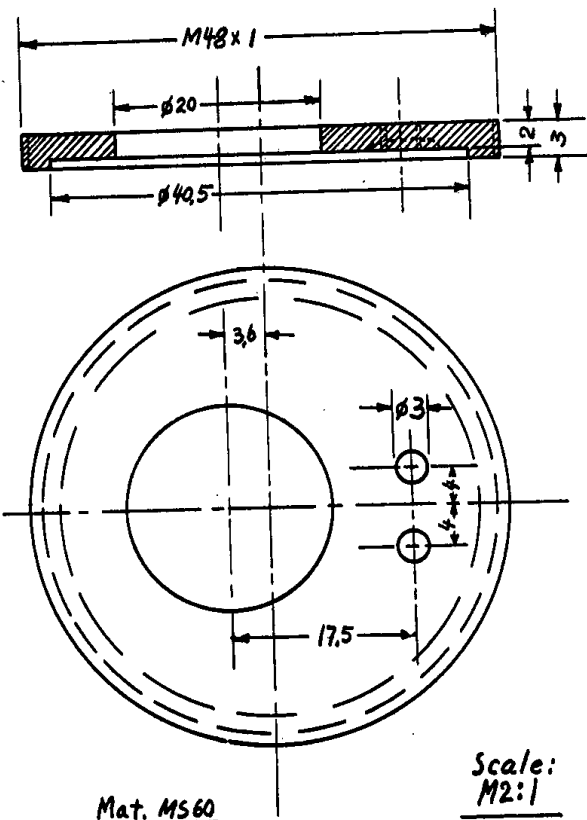
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SECTIONS OF 3CM KLYSTRON
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